Letters to the Journal

Letters are welcomed and will be published as space permits. Like other material submitted for publication, they should be typewritten, double-spaced, should be of reasonable length, and will be subject to the usual editing. The accuracy of statements of fact contained in these letters is the responsibility of the correspondent.

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INTRACTABLE CONGESTIVE HEART FAILURE SUCCESSFULLY TREATED WITH SOUTHEY TUBES

To the Editor:

Southey tube drainage is an old, almost forgotten remedy, unknown to most recent medical graduates. It is not mentioned in recent textbooks, probably because of the increased efficiency of modern diuretics. The recent successful use of this method in the treatment of intractable congestive heart failure was thought to be of interest.

The patient was a 49-year-old woman with severe heart failure due to primary pulmonary hypertension. All pertinent examinations and tests had been done under the direction of the appropriate medical and surgical consultants, and it was concluded that surgery offered no hope of help. Intensive medical treatment for congestive heart failure, including the administration of thiazides, mercurials, ammonium chloride and so on, had been ineffective (Fig. 1). Edema in the legs was plus 4 and in the lumbar region plus 3. The patient was placed on the "seriously ill" list and was too weak to get out of bed. At her request, her records were sent to the Mayo Clinic, Rochester, Minnesota, for a further opinion. After review, their consultants agreed with our findings and also did not recommend surgical treatment. In the short time which it took to get an opinion from the Mayo Clinic, the patient had in any case become too weak to travel.

One day she complained that the bed was being soaked from drainage at the site of an injection of a mercurial diuretic into her hip. This reminded us of the Southey-tube treatment. The Southey tube is a sharp 14-gauge needle about 3" long, with perforations on the sides. In this patient one was inserted into each lower leg, medial and away from the shin, pointed proximally. No local anesthetic is needed because the needle is sharp and is inserted to the hilt in one quick jab. Sterile gloves and a mask were worn, and the leg was "prepped" over a wide area first. A rubber tube was attached to each needle and these were joined by a Y-tube, which connected to a bottle at the foot of the bed. Heavy sterile dressings were applied to each leg with each tube taped to the skin near the needle's exit so that it would not be moved during the week in which it remained in place. The drainage was phenomenal, 14,455 c.c. in 11 days (Fig. 1). The weight loss was dramatic, 23 lb. in 13 days, and the edema subsided very rapidly.

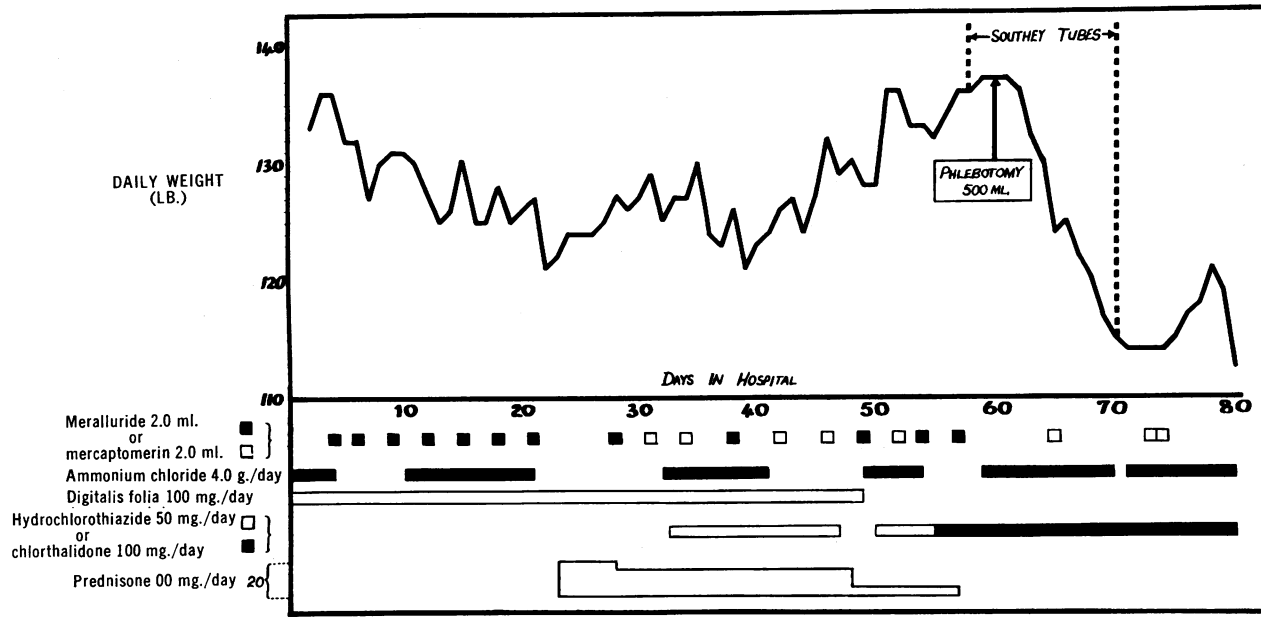

Fig. 1.—Patient's response to various diuretic agents and to Southey-tube treatment.

After a week the tubes were removed and heavy drainage continued from the needle holes for weeks, soaking the dressings. There was slight redness around the puncture sites but no actual infection.

On November 12, 1963, the tubes were reinserted but there was almost no drainage. Some fluid leaked from the old holes into the dressings. The edema was much less and confined to the legs below the knees. The patient felt much better. Mercaptomerin (Thiomerin) injections were resumed, and potassium and ammonium chloride were administered by mouth. The patient now had a much better response to diuretics.

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On December 7, 1963, an oral mercurial, chlormerodrin (Neohydrin), was tried in an attempt to attain smoother diuresis; she responded very well and her weight decreased to 108 lb. by December 10, 1963. She had had no response at all to this preparation prior to admission to hospital. Only plus 1 edema of the ankles now remained and there was no further drainage from the Southey-tube holes. She was able to walk through a long ward to the bathroom several times a day and was ready to go home.

At this time she developed severe agranulocytosis accompanied by a sore throat. After investigation it was concluded this complication was due to hydrochlorothiazide. She recovered after developing penicillin-sensitive *Staphylococcus aureus* pustules on her legs and in her throat. Subsequently, a short trial on hydrochlorothiazide depressed the white blood count again, and this agent was discontinued immediately.

When last seen (May 22, 1964), the patient was doing well at home, was almost edema-free, weighed 105 lb. in street clothes and was able to come to the office for examination. She is able to do light chores at home and she is planning to resume light office work.

References in the current literature to the use of Southey tubes are difficult to find. For those who are interested and do not have some of these tubes in hospital, a substitute may be devised as described by McLaren (*Canad. Med. Ass. J.*, 49: 209, 1943). The dramatic success of the tubes in the patient reported herein may have been due to very high venous pressure. The pressures as actually recorded by catheterization by Dr. M. Walters were: right atrium, 21/7 (mean: 12); right ventricle, 82/15; pulmonary artery, 80/44 (mean: 60); and radial artery, 112/70.

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SUCCESSFUL INTRAUTERINE BLOOD TRANSFUSION

To the Editor:

What is believed to be the first successful intrauterine blood transfusion in Canada occurred recently in the Women's Pavilion of the Winnipeg General Hospital. The mother, a former Winnipeg General Hospital nurse, had her first child without incident but lost her second and third babies because of hemolytic disease. When she became pregnant for the fourth time, it was evident from her previous history with high Rh-antibody levels that this baby would also die unless treatment were undertaken. Successful intrauterine blood transfusions had already been carried out three or four times in New Zealand and once in Rochester, N.Y., so the attending physicians determined to attempt this procedure. A test carried out 10 days prior to the first transfusion showed that the fetus was severely affected and would die long before its birth date unless immediate treatment were given.

At 26 weeks of gestation, through a long needle passed into the abdomen of the fetus, 55 ml. of packed Rh-negative cells were injected; at 28 weeks, 80 ml.; at 30 weeks, 110 ml.; and at 32 weeks 130 ml. were similarly injected. At 34 weeks labour was induced and a baby boy weighing 5 lb. 7½ oz. was born living on April 20, 1964. Three exchange transfusions were needed to bring the baby's blood up to normal but today the boy is healthy.

Blood tests indicated that the baby at birth had definite though only moderate signs of hemolytic disease. The hemoglobin concentration was 70% of normal. Ninety per cent of the blood circulating in the baby was adult Rh-negative blood transfused before birth.

Much of the credit for the happy result must be given to Dr. Bruce Chown and the superb technicians of the Rh laboratory in the same building.

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GOOD SAMARITAN LEGISLATION

To the Editor:

While it appears that the respect in which members of the medical profession are held is declining among the public at large, it would be regrettable if in the face of this we should adopt a defensive attitude. Such defensiveness seems to be manifested in the current uncertainty with respect to our responsibilities in situations where resuscitation is called for. At the present time, the methods of expired-air ventilation and external cardiac massage are accepted as the best forms of resuscitation available, which can be applied by specially trained people. Expired-air ventilation should be employed everywhere by those who have knowledge of it, and performance of cardiac massage should be properly restricted to fully trained medical practitioners and senior nursing staff.

However, there are rumours that instances have occurred elsewhere in which medical practitioners have been involved in complicated, extended and often vindictive legal procedures because of their humane acts of assistance to the seriously injured. Because of this it has been suggested by certain physicians that one should avoid involvement in situations which require emergency resuscitation, or other vital care, when the victim is unknown. The decision of physicians to abstain from volunteering their help unless the surroundings and facilities are ideal will surely cause further loss of respect for the medical profession. If resuscitation methods, or any other form of first aid, are carefully taught and cautiously applied, responsible leaders of public opinion in Canada should inform the general public that any doctor is expected to apply his knowledge freely and without fear of remote consequences. In this event there would be less need for lawyers to urge that the present law of malpractice requires amending to give better protection for those who act as good Samaritans. In any case it seems to me reprehensible that a physician should ever consider limiting urgent medical aid whatever prosecution might be threatened. While it is old-fashioned to vow by the Hippocratic oath, surely no doctor should disavow the W.H.O. Declaration of Geneva which calls for the consecration of one's life to the service of humanity and the acceptance of a patient's health as being of first consideration.

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